

IN THE CLAIMS:

Please amend the claims to read as follows:

Listing of Claims

1. (Currently Amended) A radio communication apparatus comprising:

first path measuring means for measuring the number of paths of a forward link;

first determining means for determining whether or not an operation for changing an antenna is needed based on the number of paths; and

first multiplexing means for multiplexing a first control signal, ~~which puts~~ with a determination result of said first determining means ~~thereon~~, into transmission data.

2. (Currently Amended) The radio communication apparatus according to claim 1, wherein said first determining means determines that execution of the operation for changing the antenna is needed when the number of paths of the forward link is smaller than a first threshold value.

3. (Currently Amended) The radio communication apparatus according to claim 1, further comprising first Doppler frequency measuring means for measuring a Doppler frequency of a received signal, wherein said first determining means determines whether or not the operation for changing the antenna is needed based on the number of paths of the forward link and the Doppler frequency.

4. (Currently Amended) The radio communication apparatus according to claim 3, wherein said first determining means determines that execution of the operation for changing the antenna is needed when the number of paths of the forward link is smaller than ~~the~~ a first threshold value and the Doppler frequency is smaller than a predetermined second threshold value, ~~which is present.~~

Claims 5 and 6 (Cancelled).

7. (Currently Amended) A communication terminal apparatus, having a radio communication apparatus thereon, said radio communication apparatus comprising:

first path measuring means for measuring the number of paths of a forward link;

first determining means for determining whether or not an operation for changing an antenna is needed based on the number of paths; and

first multiplexing means for multiplexing a first control signal, ~~which puts~~ with a determination result of said first determining means ~~thereon,~~ into transmission data.

8. (Currently Amended) A radio communication apparatus comprising:

~~first separating means for separating a first control signal from a received signal; and~~

~~—first change controlling means for determining whether or not an operation for changing a transmission antenna is executed based on said first control signal contained in a signal transmitted from the radio communication apparatus according to claim 1.~~

9. (Currently Amended) A radio communication apparatus comprising:

~~second separating means for separating a second control signal from a received signal;~~

~~second determining means for determining whether or not an operation for changing an antenna is executed based on the number of paths of a forward link said second control signal; and~~

second change controlling means for determining whether or not an operation for changing a transmission antenna is executed based on the determination result of said second determining means.

10. (Currently Amended) The radio communication apparatus according to claim 9, wherein said ~~second determining means~~ determines that execution of the operation for changing the antenna is needed when the number of paths of ~~a~~ the forward link is smaller than a first predetermined threshold value, ~~which is~~ preset.

11. (Currently Amended) The A radio communication apparatus comprising: ~~according to claim 9, wherein said second separating means separates a second control signal and a third control signal from a received signal, and said second~~

determining means ~~determines~~ for determining whether or not ~~the~~ an operation for changing an antenna is needed executed based on ~~said second control signal and third control signal~~ the number of paths of a forward link and a Doppler frequency; and

change controlling means for determining whether or not an operation for changing a transmission antenna is executed based on the determination result of said determining means.

12. (Currently Amended) The radio communication apparatus according to claim 11, wherein said ~~second~~ determining means determines that execution of the operation for changing the antenna is needed when the number of paths of ~~a~~ the forward link is smaller than ~~the~~ a predetermined first threshold value, ~~which is preset,~~ and the Doppler frequency is smaller than a predetermined second threshold value, ~~which is preset.~~

13. (Currently Amended) A radio communication apparatus comprising:

~~second~~ path number measuring means for measuring the number of paths of a reverse link;

~~third~~ determining means for determining whether or not ~~a change of~~ an operation for changing an antenna is needed based on the number of paths of the reverse link; and

~~third~~ change controlling means for determining whether or not an operation for changing a transmission antenna is executed based on ~~a~~ the determination result of said ~~third~~ determining means.

14. (Currently Amended) The radio communication apparatus according to claim 13, wherein said ~~third~~ determining means determines that execution of the operation for changing the antenna is needed when the number of paths of the reverse link is smaller than a third predetermined threshold value, ~~which is~~ preset.

15. (Currently Amended) The radio communication apparatus according to claim 13, further comprising ~~second~~ Doppler frequency measuring means for measuring a Doppler frequency of a received signal, wherein said ~~third~~ determining means determines whether or not the ~~change of~~ operation for changing the antenna is needed based on the number of paths of the reverse link and the Doppler frequency.

16. (Currently Amended) The radio communication apparatus according to claim 13, wherein said ~~third~~ determining means determines that the ~~change of~~ operation for changing the antenna is needed when the number of paths of the reverse link is smaller than ~~the third~~ a predetermined first threshold value, ~~which is~~ preset, and the Doppler frequency is smaller than a fourth predetermined second threshold value, ~~which is~~ preset.

17. (Currently Amended) A base station apparatus, having a radio communication apparatus thereon, said radio communication apparatus comprising:

~~first separating means for separating a first control signal from a received signal; and~~

~~—first change controlling means for determining whether or not an operation for changing a transmission antenna is executed based on said first control signal contained in a signal transmitted from the radio communication apparatus according to claim 7.~~

18. (Currently Amended) A transmission antenna changing method comprising ~~the steps of:~~

(a) measuring the number of paths of a link;

(b) determining whether or not an operation for changing an antenna is needed based on the measured number of paths; and

(c) ~~performing change control to determine~~ determining whether or not an operation for changing a transmission antenna of forward transmission data is executed based on ~~a~~ the determination result of ~~said determining~~ step (b).

19. (Currently Amended) The transmission antenna changing method according to claim 18, wherein it is determined in said

determining step (b) that execution of the operation for changing the antenna is needed when the number of paths of the link is smaller than a first predetermined threshold value, ~~which is~~ preset.

20. (Currently Amended) The transmission antenna changing method according to claim 18, further comprising ~~a step of~~ measuring a Doppler frequency of a received signal, wherein ~~said determining in step (b), determines~~ whether or not the operation for changing the antenna is needed is determined based on the number of paths of the link and the Doppler frequency.

21. (Currently Amended) The transmission antenna changing method according to claim 20, wherein it is determined in ~~said determining step (b) that execution of the operation for changing~~ the antenna is needed when the number of paths of the link is smaller than ~~the~~ a first predetermined threshold value, ~~which is~~ preset, and the Doppler frequency is smaller than a second predetermined threshold value, ~~which is present~~.

22. (New) A radio communication apparatus comprising:  
path measuring means for measuring the number of paths of a forward link; and



multiplexing means for multiplexing a control signal with information indicating the number of paths of the forward link into transmission data to the radio communication apparatus according to claim 9.

23. (New) A radio communication apparatus comprising:

path measuring means for measuring the number of paths of a forward link;

Doppler frequency measuring means for measuring a Doppler frequency of a received signal; and

multiplexing means for multiplexing a control signal with information indicating the number of paths of the forward link and information indicating the Doppler frequency into transmission data to the radio communication apparatus according to claim 11.